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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,302

07/28/2003

Lewis B. Aronson

15436.247.2.1.4

6438

22913

7590

05/02/2008

WORKMAN NYDEGGER  
60 EAST SOUTH TEMPLE  
1000 EAGLE GATE TOWER  
SALT LAKE CITY, UT 84111

EXAMINER

TRAN, DZUNG D

ART UNIT

PAPER NUMBER

2613

MAIL DATE

DELIVERY MODE

05/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/629,302	<b>Applicant(s)</b> ARONSON ET AL.	
	<b>Examiner</b> Dzung D. Tran	<b>Art Unit</b> 2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

1. Applicant's election without traverse of invention II, claims 13-26 in the reply filed on 02/06/2008 is acknowledged.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 13-22 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 7,099,382 of Aronson et al. in view of Loh et al. US patent no. 6,476,949.

Claim 1 of Aronson U.S. Patent No. 7,099,382 discloses an integrated circuit for use in a transceiver module, the integrated circuit comprising: a first electrical input port for receiving a first serial electrical data stream; receiver eye opener circuitry for

retiming and reshaping the first serial electrical data stream; a first electrical output port for transmitting the retimed and reshaped first serial electrical data stream to external to the integrated circuit; a second electrical input port for receiving a second serial electrical data stream from external to the integrated circuit; transmitter eye opener circuitry for retiming and reshaping the second serial electrical data stream; and a second electrical output port for transmitting the retimed and reshaped second serial electrical data stream. Claim 1 of Aronson U.S. Patent No. 7,099,382 differs from claims 13 and 26 of the present invention in that claim 1 of 7,099,382 does not claim a bit error rate tester (BERT) engine for testing a test data path from a starting test point to an ending test point, the starting test point and the ending test point each located on either a receive path or on a transmit path, wherein the receive path is from the first electrical input port through the receiver eye opener circuitry to the first electrical output port and the transmit path is from the second electrical input port through the transmitter eye opener circuitry to the second electrical output port. Loh discloses in Figure 1, a bit error rate tester (BERT) engine 20 for testing a test data path from a starting test point (i.e., at a transmitter 10) to an ending test point (i.e., at a receiver 50), the starting test point and the ending test point each located on either a receive path or on a transmit path, wherein the receive path is from the first electrical input port through the receiver eye opener circuitry to the first electrical output port and the transmit path is from the second electrical input port through the transmitter eye opener circuitry to the second electrical output port (col. 3, line 60 to col. 4, line 10). At the time of the invention was made, it would have been obvious to one of ordinary skill in the art to include a bit error

rate tester (BERT) engine 20 of Loh in the system of Aronson. One of ordinary skill in the art would have been motivated to do that in order to monitor and detect the condition of the optical signal from start point to the end point.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Loh et al. US 6,476,949.

Regarding claim 23, Loh discloses in Figure 1, an integrated circuit for use in a transceiver module, a method of testing a data path comprising, within the integrated circuit:

a BERT 20 for generating a test pattern and injecting the test pattern at a starting test point (i.e., at transmitter 10);

a analyzer 60 for conditioning the signal using an equalizer that adapts to channel conditions when reshaping and retiming a signal that includes the test pattern (col. 3, line 60 to col. 4, line 10); and

a receiver 50 for receiving the test pattern at an ending test point (i.e., at receiver 50); wherein the starting test point (i.e., at transmitter 10) and the ending test point (i.e., at receiver 50) are each located on either a receive path or on a transmit path, wherein the receive path is from a first electrical input port through receiver eye opener circuitry to a first electrical output port and the transmit path is from a second electrical input port through transmitter eye opener circuitry to a second electrical output port (col. 3, line 60 to col. 4, line 10).

Regarding claim 24, Loh discloses wherein the test pattern has a data rate of at least approximately 10 Gb/s (col. 3, lines 55-59).

Regarding claim 25, Loh discloses a BERT 20 for detecting errors in the test pattern received at the ending test point.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 13-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2613

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

DT

04/24/2008

/Dzung D Tran/

Primary Examiner, Art Unit 2613